

What is claimed is:

1. A processor system, which is a heterogeneous processor system that causes a second operating system of a second architecture to operate together with a first operating system of a first architecture on a processor system in which said first operating system operates, comprising:

means for partitioning hardware resources of said processor system between hardware resources that are used by said first operating system and hardware resources that are used by said second operating system;

means for storing a type and quantity of said partitioned hardware resources;

means for activating said second operating system by said hardware resources that have been reserved for use by said second operating system; and

means for activating said first operating system by said hardware resources that have been reserved for use by said first operating system;

wherein said first operating system and said second operating system are able to operate simultaneously and independently.

2. A processor system according to claim 1 that includes means for modifying the types and quantities

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of said hardware resources that are to be partitioned before partitioning said hardware resources, and that
5 is capable of modifying hardware resources that are used at a time of system activation.

3. A processor system according to claim 1 that includes means for reserving memory areas that can be shared by said first operating system and said second operating system, wherein data exchange between said
5 first operating system and said second operating system can be performed by way of memory.

4. A processor system according to claim 2 that includes means for reserving memory areas that can be shared by said first operating system and said second operating system, wherein data exchange between said
5 first operating system and said second operating system can be performed by way of memory.

5. A processor system according to claim 3 that includes means for realizing communication in said first operating system and said second operating system, wherein, through communication realized by said first
5 operating system and said second operating system using shared memory areas, the system in which said first operating system operates is used as an input/output

processor of the system in which said second operating system operates.

6. A processor system according to claim 4 that includes means for realizing communication in said first operating system and said second operating system, wherein, through communication realized by said first
5 operating system and said second operating system using shared memory areas, the system in which said first operating system operates is used as an input/output processor of the system in which said second operating system operates.